

Federal Aviation Administration

APR 1 4 2011

The Honorable John D. Rockefeller, IV Chairman, Committee on Commerce, Science and Transportation United States Senate Washington, DC 20510

Dear Mr. Chairman:

As requested by Section 214 of the Airline Safety and Federal Aviation Administration Extension Act of 2010, I am pleased to provide you with the Aviation Safety Action Program and Flight Operational Quality Assurance Implementation Plan.

The report provides a response to each area identified in the legislation.

We have sent identical letters to Chairman Mica, Senator Hutchison, and Congressman Rahall.

Sincerely,

J. Randolph Babbitt

Administrator



Federal Aviation Administration

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The Honorable Kay Bailey Hutchison Committee on Commerce, Science and Transportation United States Senate Washington, DC 20510

Dear Senator Hutchison:

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800 Independence Ave., S.W.

Washington, D.C. 20591

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Federal Aviation Administration

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The Honorable John L. Mica Chairman, Committee on Transportation and Infrastructure House of Representatives Washington, DC 20515

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The Honorable Nick J. Rahall, II Committee on Transportation and Infrastructure House of Representatives Washington, DC 20515

Dear Congressman Rahall:

As requested by Section 214 of the Airline Safety and Federal Aviation Administration Extension Act of 2010, I am pleased to provide you with the Aviation Safety Action Program and Flight Operational Quality Assurance Implementation Plan.

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Sincerely,

J. Randolph Babbitt Administrator



ASAP & FOQA IMPLEMENTATION PLAN P.L. 111-216, SECTION 214

January 28, 2011

Summary

This report contains the Federal Aviation Administration (FAA) Development and Implementation Plan to facilitate the establishment of an Aviation Safety Action Program (ASAP) and Flight Operational Quality Assurance (FOQA) program by all part 121 air carriers. The plan is submitted in response to the Airline Safety and Federal Aviation Administration Extension Act of 2010 (P.L. 111-216), Sec. 214, which reads as follows:

SEC. 214. ASAP AND FOQA IMPLEMENTATION PLAN.

- (a) Development and Implementation Plan- The Administrator of the Federal Aviation Administration shall develop and implement a plan to facilitate the establishment of an aviation safety action program and a flight operational quality assurance program by all part 121 air carriers.
- (b) Matters to be Considered- In developing the plan under subsection (a), the Administrator shall consider--
- (1) how the Administration can assist part 121 air carriers with smaller fleet sizes to derive a benefit from establishing a flight operational quality assurance program;
- (2) how part 121 air carriers with established aviation safety action and flight operational quality assurance programs can quickly begin to report data into the aviation safety information analysis sharing database; and
- (3) how part 121 air carriers and aviation safety inspectors can better utilize data from such database as accident and incident prevention tools.
- (c) Report- Not later than 180 days after the date of enactment of this Act, the Administrator shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a copy of the plan developed under subsection (a) and an explanation of how the Administration will implement the plan.
- (d) Deadline for Beginning Implementation of Plan- Not later than one year after the date of enactment of this Act, the Administrator shall begin implementation of the plan developed under subsection (a).

Background

In response to Section 213 of P.L. 111-216, the FAA queried all 94 part 121 airlines for responses to the questions in that section. The FAA determined that 38 part 121 air carriers operate with 15 or fewer aircraft in their inventory. Of those, 16 airlines have an ASAP and only 3 airlines have a flight operations quality assurance FOQA program. One of these airlines utilizes the resources of an affiliated major carrier to accomplish its program. Airlines with small fleets (defined here as 15 or fewer aircraft) have identified cost considerations and operational feasibility as obstacles to initiating either an ASAP or a FOQA program. Still, the FAA has seen an increase in applications for ASAP and FOQA approvals since the FAA's "Call to Action" on Airline Safety and Pilot Training. Other efforts are increasing interest in both ASAP and FOQA, such as the implementation of Safety Management Systems (SMS) and an International Civil Aviation Organization standard, which requires an airline to have a flight data monitoring program.

SEC. 214. (1) How the Administration can assist part 121 air carriers with smaller fleet sizes to derive a benefit from establishing a flight operational quality assurance program.

As previously noted, the FAA Administrator has seen success in his previous outreach to encourage the implementation of ASAP and FOQA at part 121 air carriers. The FAA will continue these outreach efforts and focus on the small part 121 air carriers. The FAA has a range of options available to it to promote ASAP and FOQA, depending on budget and resource availability, including improving existing ASAP tools and guidance, hosting ASAP-FOQA Information Sharing meetings with the industry, or conducting another FOQA demonstration project.

Additionally, the FAA is increasing the functionality of its Web-based Analysis Tool (WBAT). The WBAT is a *cost-free*, Web-based ASAP event reporting and analysis database system provided by the FAA to U.S. airlines participating in an ASAP. The WBAT provides airlines with a means of complying with the FAA requirement that all air carriers with an ASAP have a database for capturing reports. These improvements in functionality are designed to make the WBAT an appropriate tool to meet certain requirements of an SMS, including capturing and analyzing confidential employee safety reports and providing a comprehensive Internal Evaluation Program database capability that complies with all of the auditing data acquisition and analysis requirements of an SMS. Since the WBAT could also be used in an air carrier's SMS, we believe these enhancements will provide all part 121 air carriers an increased incentive to participate in ASAP. We plan to complete these enhancements to the WBAT by July 1, 2012.

The FAA is also in the process of revising its ASAP Advisory Circular 120-66 by July 1, 2011. The revision is intended to capture lessons learned in the program during the past decade, including best practices and to clarify FAA policy on issues that have on occasion been subject to misunderstanding and consequently have discouraged airlines and labor organization from pursuing ASAP. We believe these clarifications may

promote participation in ASAP by small air carriers, and we expect to publish a draft of the proposed advisory circular revision for public comment in the Federal Register in mid-2011.

Another step the FAA will take is to continue to sponsor biannual FOQA – ASAP Information Sharing Meetings. Although the FAA already invites all part 121 airlines to these meetings, we will reach out especially to those small air carriers that do not currently have ASAP or FOQA programs. These meetings not only provide a venue for airlines to share the successes achieved with their FOQA and ASAP programs but also provide a highly credible source of information on FOQA and ASAP program benefits for airlines that are considering but not yet participating in such programs.

The FAA is also considering a new FOQA demonstration project limited to airlines with small fleets to determine the cost effectiveness and feasibility of FOQA for that community of operators. As a first step, the FAA issued a Market Survey/Request for Information on November 22, 2010, soliciting proposed approaches and estimated costs for a statement of work (SOW) that would fund a FOQA demonstration study for U.S. airlines with fleet sizes of 15 or fewer aircraft. Based on the results of this Market Survey, the FAA may develop a final SOW for a small fleet FOQA demonstration project contract.

SEC. 214. (2) How part 121 air carriers with established aviation safety action and flight operational quality assurance programs can quickly begin to report data into the aviation safety information analysis sharing database.

The present Aviation Safety Information and Analysis (ASIAS) systems have already been constructed to allow part 121 air carriers with established ASAP and FOQA programs to become participants in ASIAS without imposing increased workload on the carrier, while ensuring that each participant's data adds to overall system capability.

The FAA, in collaboration with the aviation community, has established a governance process, implemented an information sharing architecture, and integrated data from ASIAS participants. In order to become an ASIAS participant, an air carrier must first have an FAA-approved FOQA and/or ASAP program. The air carrier must then sign a Memorandum of Understanding (MOU) with the data integrator (currently MITRE/Center for Advanced Aviation System Development). The MOU defines the terms and conditions between the air carrier and MITRE, whereby MITRE will be permitted to access de-identified FOQA data and/or de-identified ASAP reports for the purpose of aggregating these data for research topics requested by the ASIAS Executive Board (AEB). Thus ASIAS not only permits air carriers to "quickly begin to report" but also ensures that high-quality, representative samples are added to the system.

The elements of the ASIAS ASAP architecture are already in place, and the FAA intends to continue to support and develop this system. The ASIAS ASAP system supports the hardware, networking, and software required to enable airlines to provide ASAP data to the ASIAS program. The ASIAS ASAP system supports both data on ASIAS servers

located at the airline's facility and data on ASIAS servers located at MITRE on dedicated servers. The ASIAS ASAP system has also been tailored for expansion. While the addition of each new airline data source into ASIAS requires some initial resource expenditure, the present system has been designed to minimize this work. The present system is scalable up to the inclusion of all foreseeable ASAP programs. The next stage of the FAA's plan to integrate ASAP data into ASIAS focuses on the inclusion of all ASAP programs, not just the most recent, especially the programs receiving reports from other front-line employee groups with a stake in safe operations.

The FOQA analysis system has also been built to support the inclusion of data from new ASIAS participants and has been tailored for expansion and is scalable up to the inclusion of all foreseeable FOQA programs. Although new FOQA data providers can "quickly begin to report data" into ASIAS, the initial inclusion of a new airline into the ASIAS FOQA databases can be complicated. Before any data from a new airline can actually be merged into the ASIAS FOQA databases, a reasonably large and representative sample of flights must be meticulously examined for data quality and structural issues. The FAA believes that enhanced data standards for FOQA data could increase the usability of the data in ASIAS analyses. In the three years of experience thus far in ASIAS, it has become increasingly clear that FOQA would greatly benefit from standards designed to address these data issues. In the future, the FAA intends to convene a working group, made up of FAA and industry representatives, to develop these standards. The new standards would reduce the time required to incorporate FOQA data from a new ASIAS airline, thus shortening the time for the airline to start receiving benefits from the system.

SEC. 214. (3) How part 121 air carriers and aviation safety inspectors can better utilize data from such database as accident and incident prevention tools.

The primary purpose of ASIAS is to provide the analytical capability for discovering and understanding systemic safety issues in the National Airspace System. ASIAS has access to multiple data sources used to conduct proactive safety analyses. In addition to digital flight data from FOQA programs and voluntary pilot safety reports from ASAP, ASIAS includes FAA data (such as air traffic control radar track data) as well as other industry data sources.

Since its inception, ASIAS has been governed by the AEB. The AEB is comprised of executive-level representatives from ASIAS's principal stakeholders: the FAA, NASA, air carriers, labor associations, and manufacturers. It operates in accordance with agreed upon formal principles; namely, that data is to be used solely for the advancement of safety and not for punitive purposes, air carrier data is to be de-identified, and all analyses must be approved by the AEB. The AEB forwards the results of all analyses to established government and industry safety teams, such as the Commercial Aviation Safety Team, for further action as appropriate. These safety teams then develop industry safety enhancements based on the information received from the AEB. We believe this process is effective to communicating information to part 121 air carriers.

We are also in the process of developing a Flight Standards Safety Assurance System (SAS) to replace the existing Air Transportation Oversight System in Fiscal Year (FY) 2013. Initial development of the SAS is nearing completion and the initial implementation phase of that initiative is scheduled to begin in late FY 2011. The SAS includes a National Safety Analysis module which will identify operational trends from voluntary safety program data, including national data obtained from the ASIAS program. These trends along with other information will be used to produce National Safety Guidelines that will, in turn, be used to generate inspection protocols to be employed by FAA field inspectors. We believe the SAS will improve the utilization of information from the ASIAS database by the inspector workforce.